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|--|-------------|----------------------|-----------------------------|------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/037,539 | 12/21/2001 | Dane Kenton Parker | DN2001214 | 7282 |
| 7590 | 05/21/2004 | | EXAMINER | |
| The Goodyear Tire & Rubber Company Patent & Trademark Department - D/823 1144 East Market Street Akron, OH 44316-0001 | | | WYROZEBSKI LEE, KATARZYNA I | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1714 | |
| DATE MAILED: 05/21/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/037,539 | PARKER ET AL. | |
| | Examiner | Art Unit | |
| | Katarzyna Wyrozebski | 1714 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 21-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 3,10-13,15,21-25 and 27 is/are rejected.
- 7) ☒ Claim(s) 1,2,4-6,14,16,26 and 28-32 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

Since the examiner was not able to contact the applicant's representative following first office action has been issued with no prior art rejections.

Abstract

According to the MPEP, an abstract should be only one paragraph and approximately 150 words. The applicants are therefore requested to properly amend the abstract.

Title

According to the MPEP the title should be approximately 10 words. The applicants are therefore requested to amend the title of the present invention.

Claim Objections

1. Claim 1 is objected to because of the following informalities: In the present claim 1 (B) the applicants recites twice clay having cation exchangeable ions, which recitation is redundant. Appropriate correction is required.
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Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3, 10-13, 15, 21-25, 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Recitation of limitation of “substantially simultaneous” renders claim indefinite.

Claim 3 also recites that the process can include step of coagulation of elastomer particles from the destabilized elastomer latex. At the same time, claim 21 the applicants are preventing the coagulation of the elastomer particles from said latex. The applicants are therefore requested to clarify this issue.

Use of term “based” in description of clay renders claims 10 and 22 is indefinite.

Claims 10 and 22 are redundant, since they are the same.

Claims 11 and 23 are redundant, since they are the same.

Claims 12 and 24 are redundant, since they are the same.

Claims 13 and 25 are redundant, since they are the same.

Claims 15 and 27 are redundant, since they are the same.

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The prior art of record cited by the applicant does not teach the elastomer latex particles having cationic charge thereon, formed before they are incorporated into the clay dispersion.

Teaching in clay nanocomposites that were found during the search resulted in two PCT documents that do not apply as a prior art against present invention for date purposes. These documents are WO 2004005387, WO 2004005388.

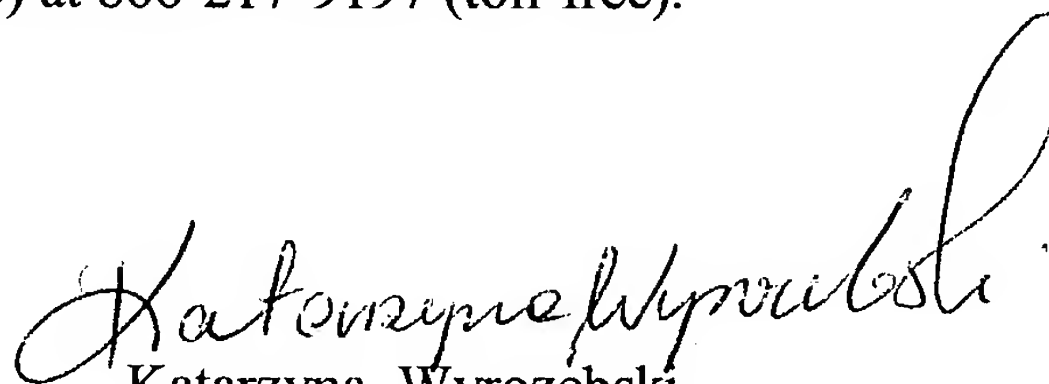
Second disclosure taught free radical polymerization of elastomer monomer in presence of initiator, ammonium surfactant and clay. In the above disclosure (WO 97/00910) the elastomeric particles are not preformed. The WO disclosure also does not teach if the process involved will result in formation of elastomeric particles having cationic charge thereon.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Katarzyna Wyrozebski
Primary Examiner
Art Unit 1714

May 17, 2004